



Patent [19]

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[54] AIR CLEANER

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[57] ABSTRACT

PROBLEM TO BE SOLVED: To easily and efficiently clean air containing dust and moreover containing malodor by providing an electric dust collecting part for collecting dust, etc., by a corona discharge and moreover providing a deodorizing part with a photocatalyst at a post stage of the electric dust collecting part.

SOLUTION: Large sized dust, etc., in the sucked air containing dust and malodorous component is removed with a pre-filter 5 and the dust is adsorbed with the electric dust collecting part 6 (hereafter referred to as A). Then the malodorous component is decomposed and removed and the air is cleaned by the photocatalyst excited with an exciting light source 10 at a photocatalyst deodorizing part 7 hereafter referred to as B). In this case, the decomposition with the photocatalyst is facilitated and a deodorizing efficiency is improved since the molecule of the malodorous component is converted to a negative ion by the corona discharge at (A). The decrease in the deodorizing efficiency due to the decrease in an exciting efficiency and contact efficiency by sticking the dust, etc., on the photocatalyst and an ultraviolet lamp by removing the dust, etc., at (A) before the air to be purified reaches (B), are prevented.
